IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)
Mishada WAZOHEZ) Group Art Unit: TBA
Michael L. VAZQUEZ et al.) Examiner: TBA
Serial No. TBA) Examiner. TBA
) Atty. Docket 101765.00142 (2705/17/cont.)
Filed: August 4, 2003)

For:

α- AND β-AMINO ACID HYDROXYETHYLAMINO SULFONAMIDES USEFUL AS RETROVIRAL

PROTEASE INHIBITORS

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, enclosed is form PTO-1449 listing documents for consideration by the Examiner during the prosecution of the above-captioned patent application. With the exception of U.S. Patent Nos. 6,500,832; 6,472,407; 6,534,493; and 6,455,581, these documents were previously listed in an Information Disclosure Statement in the parent application of Serial No. 10/157,019, filed May 30, 2002, which is relied on for an earlier effective filing date under 35 U.S.C. § 120. Therefore, except for the above-identified U.S. patents, copies of these documents are not being submitted herewith, in accordance with 37 C.F.R. § 1.98(d).

Applicants respectfully request that the Examiner consider and enter all the documents cited on the enclosed PTO-1449 Forms into the file of the above-identified application.

Applicants also request an indication of the same by return of the PTO-1449 Forms being initialed and dated by the Examiner.

It is believed that no fee is due for this submission, as it is being provided within the time period specified under 37 C.F.R. § 1.97(b)(1). However, if a fee is required, please charge our Deposit Account No. 19-0733.

Date: August 4, 2003

By:

Joseph M. Skerpon Registration No. 29,864

Respectfully submitted,

BANNER & WITCOFF, LTD. 1001 G Street, NW Washington, DC 20001 202-824-3000 Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449A/PTO				Complete if Known			
INFORMATION DISCLOSURE				Application Number	TBA		
STATEMENT BY APPLICANT		Filing Date	August 4, 2003				
			First Named Inventor	Michael L. Vazquez			
			Group Art Unit	TBA			
	(use as many she	ets as	necessary)	Examiner Name	TBA		
Sheet	1	of	7	Attorney Docket Number	101765.00142 (2705/17/Cont.)		

			U.S. PATENT (DOCUMENTS		
Examiner Cite		Document Number	Publication Date	Name of Patentee or Applicant of	Boson Columns Lines M/hore Bullion	
Initials *	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Pages, Columns, Lines, Where Releva Passages or Relevant Figures Appear	
		US-5,843,946	12/1/1998	Vazquez et al.		
		US- 6,060,476	5/9/2000	Vazquez et al.		
		US- 5,968,942	10/19/1999	Vazquez et al.		
		US- 6,046,190	4/4/2000	Vazquez et al.	-	
		US- 5,786,483	7/28/1998	Vazquez et al.		
		US- 6,172,082	1/9/2001	Vazquez et al.		
		US- 5,830,897	11/3/1998	Vazquez et al.		
		US- 5,744,481	4/28/1998	Vazquez et al.		
		US- 6,248,775	6/19/2001	Vazquez et al.	1,00	
		US- 6,335,460	1/1/2002	Vazquez et al.		
		US- 6,417,387	7/9/02	Vazquez et al.		
		US- 6,500,832	12/31/02	Vazquez et al.		
		US- 6,472,407	10/29/02	Vazquez et al.		
		US- 6,534,493	3/18/03	Vazquez et al.		
		US- 6,455,581	9/24/02	Vazquez et al.		
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		FOREIGN PA	TENT DOCU	MENTS		
Examiner Cite		Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,	
Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T ⁶
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Examiner Signature	Date Considered	

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¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04. Applicant's unique citation designation number (optional). See Ninus codes of OSF TO Fatent Documents at www.uspro.gov of Mir LF 301.07.

3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/PTO					Complete if Known
INICO		DIC	CL OCUDE	Application Number	ТВА
			CLOSURE	Filing Date	August 4, 2003
SIAI	EMENT B	ΥA	PPLICANT	First Named Inventor	Michael L. Vazquez
				Group Art Unit	ТВА
	(use as many she	ets a	s necessary)	Examiner Name	TBA
Sheet	2	of	7	Attorney Docket Number	101765.00142 (2705/17/Cont.)

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		U.S. Patent Application Serial No. 10/199,481, filed July 22, 2002, Vazquez et al.	
			

Examiner	Date	
Signature	Considered	

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PTO-1449 (Modified)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 101765.00142 (2705/17/Cont)

SERIAL NUMBER

TBA

INFORMATION DISCLOSURE STATEMENT BY APPLICANT APPLICANT(s):

Vazquez, et. al.

FILING DATE

GROUP ART UNIT

August 4, 2003

TBA

3 of 7

U.S. PATENT DOCUMENTS

		T	TATENT DOCUMENT			
EXAMINER INITIAL	DOCUMENT NUMBER	ISSUE DATE	NAME	CLAS S	SUB CLASS	FILING DATE
	4,826,815	05/02/89	Luly et al.	514	19	
	5,585,397	12/17/96	Tung et al.	514	473	
	4,599,198	07/08/86	Hoover	260	998.2	26 Sep 1985
	SIR H725	01/02/90	Gordon	548	533	26 Feb 1987
	4,514,391	04/30/85	Gordon et al	514	2	21 Jul 1983
	4,450,164	05/22/84	Bristol et al	424	256	20 Dec 1982
	4,477,441	10/16/84	Boger et al.	424	177	14 Sep 1983
	4,548,926	10/22/85	Matsueda et al	514	19	7 Jun 1984
	4,616,088	10/07/86	Ryono et al	546	336	14 Dec 1984
	4,668,769	05/26/87	Hoover	530	331	12 Aug 1985
	4,668,770	05/26/87	Boger et al	530	331	8 May 1984
	4,757,050	07/12/88	Natarajan et al	514	18	28 Aug 1987
	4,880,938	11/14/89	Freidinger	548	492	16 Jun 1986
	4,963,530	10/16/90	Hemmi et al	514	19	21 Mar 1988
	4,977,277	12/11//90	Rosenberg et al	549	215	5 Jun 1989

EXAMINER

DATE CONSIDERED

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FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
	0 346 847	12/20/89	EP	C07D	207/10	
	0 342 541	11/23/89	EP	C07K	5/02	
	2 184 730	07/01/87	UK	C07K	5/00	
	2 209 752	08/24/89	GB	C07C	103/30	
	0 264 795	04/27/88	EP	C07K	5/00	
	2 200 115	07/27/88	GB	C07C	103/00	
	WO84/03044	08/16/84	PCT	A61K	37/64	
	AU-A-79823/87	04/28/88	Australia	C07K	005/06	
	104,041	03/03/84	Europe	C07C	103/52	
	114,993	06/06/84	Europe	C07C	103/52	
	172,347	02/26/86	Europe	C07K	5/00	
	223,437	05/27/87	Europe	C07K	5/00	
	337,714	10/18/89	Europe	C07K	5/02	
	WO94/05639	03/17/94	Europe	C07D	215/48	
	356,223	02/28/90	Europe	C07K	37/64	
	389,898A2	10/03/90	Europe	C07K	5/02	
	393,445	10/24/90	Europe	A61K	37/64	·
	393,457	10/24/90	Енгоре	C07K	005/06	
	402,646	12/19/90	Europe .	C07D	213/40	
	468,641	01/29/92	Еигоре	C07D	5/02	
·	92/08699	05/29/92	PCT/WO	C07D	215/48	N N
	94/04492	03/03/94	PCT/WO	C07C	311/29	

PTO-1449 (Modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 101765.00142(2705/17/Cont)	SERIAL NUMBER TBA	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT(s): M. Vazquez et al.		
5 of 7	FILING DATE August 4, 2003	group art unit TBA	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Roberts et al, "Rational Design of Peptide-based Proteinase Inhibitors," <u>Science</u> , <u>248</u> , 358 (1990).
Erickson et al, "Design Activity and 2.8À Crystal Structure of a C ₂ Symmetric Inhibitor Complexed to HIV-1 Protease," <u>Science</u> , <u>249</u> 527 (1990)
Pearl et al, "Sequence specificity of retroviral proteases," Nature, 328 (1987)
Martin, <u>Drugs of the Future</u> , <u>16</u> (3), 210-212 (1991)
Meek et al, <u>Letter to Nature</u> , <u>343</u> , 90-92 (1990)
McQuade et al, "A Synthetic HIV-1 Protease Inhibitor with Antiviral Activity Arrests HIV-like Particle Maturation," Science, 247, 454-456 (1990)
Rich et al, "Peptide Inhibitors of Proteases," <u>Design of Protease Inhibitors</u> 511-520 (1984)
Rosenberg et al <u>J. Med. Chem.</u> , <u>30</u> , 1224-1228 (1987)

EXAMINER	DATE CONSIDERED					
EXAMINER: Initial citation if reference was considered. Draw line through citation if not in conformance to MPEP 609 and not considered. Include copy of this form with next communication to applicant.						

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USPTO Form 1449 U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE			Attorney Docket 101765.00142(2705/	Serial No. TBA					
CITATION			Applicant(s): Vazquez et al.						
Sheet 6 of 7			Filing Date: August 4, 2003 Group: TBA			TBA			
U.S. PATENT DOCUMENTS									
Examiner Initial	Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate)			
	5,856,353	Jan. 1999	Tung et al.	514	473				
	5,723,490	March 1998	Tung	514	478				
	5,977,137	Nov. 1999	Tung et al.	514	312				
FOREIGN	PATENT DOCUMENTS								
Examiner	Document No.	Date	Country	Class	Subclass	Translation			
Initial						YES	NO		
		·							
OTHER D	OCUMENTS (including A	uthor. Title, Date, Pert	inent Pages, etc.)						
EXAMINER				DATE CONSIDERED					
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.									
**Copies of references not provided at the time of this submission.									

USPTO Form 144	U.S. Department of Commerce Protect and Tradecourt Office INFORMATION DISCLOSURE CITATION							
	7 of 7		Piling Date: August 4, 2003			Expected Group:		
		U.S. PATEN	T DOCUMENTS				•	
Examiner Initial	Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate) 8/24/93		
	5,843,946	12/1/98	Vazquez et al.	514	252			
	<u> </u>	FOREIGN PAT	ENT DOCUMENTS	1	<u></u>		· 	
Examiner	Document No.	Date .	Country	Class	Subclass	Translation		
Initial						YES	NO	
	WO 99/33792	04/08/99	PCT	<u> </u>				
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	OTHER D	OCUMENTS (including A	author, Title, Date, Pert	inent Pages	s, etc.)			
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